

ABSTRACT OF THE DISCLOSURE

A light clock measures time by having a light pulse source initiating a light pulse which travels a preset distance in an open or closed loop. A counter is  
5 increases incrementally upon detection of the light pulse by a light pulse detector. Each increment is a time interval, which is determined by the preset distance divided by the speed of the light pulse. If the loop is an open loop, another light pulse may be initiated upon detection of the previous light pulse. If the loop is a closed loop, no further light pulse initiation beyond the  
10 initial light pulse is required, but, when necessary, a light pulse amplifier is used to amplify the light pulse for the next cycle around the closed loop in the light pulse transmission device.